

Current ENERGY STAR Certified Homes Policy Record

How to Use This Document

EPA regularly receives partner questions and comments regarding various aspects of the program documents. This document is a record of the issues that have been received since the release of the last revision to the program documents. These issues are either pending resolution by EPA or have been resolved, sometimes resulting in modifications that will be incorporated into the next revision of the program documents. The primary purpose of this document is to allow all partners to have equal access to the latest policy issues and resolutions.

For Version 2.5 and Version 3, EPA intends to formally incorporate policy modifications into the next revision of the program documents. Those edits will then be enforced for homes permitted after a specified transition period, typically 60 days from the release of the revised guidelines. Partners may, at their discretion, use the determinations in this document immediately, in advance of the formal implementation dates. If they do so, they should be sure to document the permit dates of the affected homes and to include a copy of the policy record in the files retained by the Home Energy Rater. Should the need arise, this will allow partners to demonstrate that they acted with the best information available.

Definitions

Each issue listed here is classified as a Change, Clarification, Refinement, Comment, or as an Issue Under Review. These are defined as follows:

- ***Change*** – The addition, deletion, or modification of a program requirement. A change will typically result from a partner question or feedback indicating that EPA's original intent is not being met or from changes in relevant standards (e.g., ENERGY STAR labeled product requirements, NAECA standards, IECC codes). A change is the most significant type of edit for partners because it is likely to change the way that partners comply with the program.
- ***Clarification*** – The clarification of a program requirement, typically resulting from a partner question indicating confusion or ambiguity. Clarifications are not intended to significantly change the scope of the program guidelines, but rather to clarify the original intent of the requirement. A clarification is secondary in importance to a change; it should not significantly alter the way that most partners comply with the program.
- ***Refinement*** – A minor revision, such as an improved choice of words, a grammatical correction, or a correction to a typographical error. A refinement is the least important type of edit; it should have no impact on the way that partners comply with the program.
- ***Comment*** – A comment provided by EPA in response to a question, which results in no change to the program documents. This may occur, for example, if the question can be answered by referring to already established policy. Aside from the partner asking the question, such comments will typically have no impact on the way that partners comply with the program.
- ***Issue Under Review*** – An issue that has been submitted and that EPA is still evaluating. Once EPA has evaluated the issue, it will offer a resolution and reclassify the issue using one of the four categories above.

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ID	Log Date	Program Document	Classification	Topic
00282	12/31/2012	National Program Requirements (Version 3, Rev. 06)	Comment	<p data-bbox="871 263 2011 305">ENERGY STAR certification of homes undergoing a ‘gut rehabilitation’</p> <p data-bbox="871 311 2011 418">Issue: Partners have asked if existing homes are permitted to be ENERGY STAR certified and if so, whether there are any exemptions or alternatives to the guidelines that apply to these homes.</p> <p data-bbox="871 425 2011 792">Resolution: Historically, EPA has allowed existing homes to earn the ENERGY STAR when all program requirements are met. EPA does recognize that some of the current program requirements present unique challenges for existing homes, even those undergoing a gut rehabilitation. Therefore, EPA has assessed whether there are alternative compliance options that would meet the intent of the current requirements and allow these homes to be ENERGY STAR certified. Note that the goal was not to develop a separate label, but rather to allow these homes to achieve the same intent of the ENERGY STAR Certified Home requirements through alternative options. While many requirements were analyzed, the Policy Record only contains the requirements for which an alternative compliance path was created or a clarification needed. While these alternative paths meet the original intent of the Items, they are not necessarily a best practice for new construction. Thus, these alternative options are only available to existing homes.</p> <p data-bbox="871 799 2011 889">Through this process, EPA has identified key components that may need to be in the scope of an existing home project to meet the ENERGY STAR requirements. These include the following:</p> <ol data-bbox="982 896 2011 1117" style="list-style-type: none"> 1) Remove exterior cladding and the outer surface of roof to install and/or verify the components on the Water Management System Builder Checklist and Thermal Enclosure System Rater Checklist 2) Replace or expose most systems, equipment, or components (e.g. HVAC and ducts, windows, insulation) 3) Grade the site and/or provide drains/swales 4) Implement below-grade moisture management strategies <p data-bbox="871 1123 2011 1247">EPA acknowledges that additional alternatives, increased flexibility, and alternative assessment protocols would expand the number of homes able to earn the ENERGY STAR. EPA is committed to including additional alternatives as they become available so that more homes may earn the ENERGY STAR label without sacrificing performance.</p>
00008	07/25/2011	National Program Requirements (Version 3, Rev. 04)	Issue Under Review	<p data-bbox="871 1253 2011 1295">Performance Path – Modeling requirements for multifamily buildings</p> <p data-bbox="871 1302 2011 1390">Issue: Partners have asked if each unit in a multifamily building must be modeled, or if either the entire building as a whole or some subset of units can be modeled under the Performance Path. Partners have also asked what HERS Index should be assigned to units that are not</p>

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				modeled, if it is acceptable to not model each unit.
				Resolution: [Issue under review.]
00017	07/25/2011	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Issue Under Review	Use of infrared thermography
				Issue: Partners have asked if infrared thermography can be used to complete the Thermal Enclosure System Rater Checklist.
				Resolution: [Issue under review.]
00111	01/15/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Issue Under Review	Item 2.2 & Item 4.4.1 – Reflective insulation
				Issue: Partners have asked for permission to use radiant barrier house wrap as reflective insulation for the purpose of fulfilling Items 2.2 and 4.4.1. Policy Record Item 00024 did not allow this practice because the R-values for reflective insulation products rely on air spaces that are not integral to the products and because the ICC Evaluation Service typically classifies such products as weather barriers rather than as insulation products. In response to this guidance, partners have asked EPA to reevaluate the acceptability of reflective insulation products on the grounds that they reduce heat transfer when installed properly, they are treated as insulation products under the Federal Trade Commission 16 CFR Part 460 – Labeling and Advertising of Home Insulation, and there are applicable standards that govern their specification and installation (ASTM C727 and ASTM C1224).
				Resolution: [Issue under review.]
00112	01/15/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 04)	Issue Under Review	Section 3 – Exterior air barriers on attic kneewalls
				Issue: Partners have asked if an exterior air barrier must be installed on attic kneewalls if the ceiling insulation depth is higher than the kneewall.
				Resolution: [Issue under review.]
00283	12/31/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 06)	Change	Item 4.2 - Slab edge insulation alternative for existing homes
				Issue: Partners certifying existing homes have expressed concern that this requirement would require excavation around, or removal of, the slab, which is not typically within the scope even for a gut rehabilitation. If the slab edge is not already insulated, the perimeter around the slab would need to be excavated or the slab itself removed and replaced to add the required insulation.
				Resolution: Uninsulated sections of slabs create thermal bridges that reduce the efficiency of the thermal enclosure system and can impact the comfort of the home. Insulating 100% of the slab edge eliminates these thermal bridges. To meet this same intent, rigid insulation \geq R-3 is permitted to be installed on top of an existing slab prior to the installation of the flooring.

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				<p>To reflect this alternative, the following will be added to the end of Footnote 4: “Alternatively, the thermal break is permitted to be created using \geq R-3 rigid insulation on top of an existing slab (e.g., in a home undergoing a gut rehabilitation). In such cases, up to 10% of the slab surface is permitted to not be insulated (e.g., for sleepers, for sill plates). Insulation installed on top of slab shall be covered by a durable floor surface (e.g., hardwood, tile, carpet).”</p>
00284	12/31/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 06)	Change	<p>Item 5.2.1 - Sealing sill plates in existing structural masonry buildings</p>
				<p>Issue: Partners certifying existing homes have asked if this Item is applicable to structural masonry and other monolithic wall assemblies.</p>
				<p>Resolution: EPA anticipates that for most homes with structural masonry walls, or other monolithic wall assemblies, that are undergoing a gut rehabilitation, the wall itself, the wall insulation, or additional sealing will create an air barrier on the exterior side of the sill plate. For sill plates on the interior side of a structural masonry wall that are integrated with the exterior air barrier, EPA recommends, but does not require, that these sill plates be air sealed.</p> <p>To reflect this intent, a Footnote will be added to this Item that reads: “Existing sill plates (e.g., in a home undergoing a gut rehabilitation) on the interior side of structural masonry or monolithic walls are exempt from this Item.”</p> <p>Partners are encouraged to read Building America’s “Measure Guideline: Internal Insulation of Masonry Walls” by J.F. Straube, K. Ueno, and C.J. Schumacher of Building Science Corporation for more information about the benefits of a continuous integrated thermal / air barrier.</p>
00285	12/31/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 06)	Change	<p>Item 5.2.1 - Foam gasket beneath an existing sill plate</p>
				<p>Issue: Partners certifying existing homes have expressed concern that it is not feasible to remove sill plates to place a gasket beneath, even for a gut rehabilitation.</p>
				<p>Resolution: Sill plates are a commonly overlooked place that is prone to infiltration due to uneven surfaces and adjacent dissimilar materials. A gasket combined with caulk is the preferred approach to minimizing leakage at this interface. To achieve the same intent in existing homes, partners are permitted to instead seal around all sill plates and bottom plates resting atop concrete or masonry and adjacent to conditioned space. This includes sealing the seam where the top exterior edge of the plate meets the sheathing and sealing the seam where the bottom interior edge of the plate meets the concrete or masonry.</p> <p>A Footnote will be added to this Item that reads: “Existing sill plates resting atop concrete or masonry and adjacent to conditioned space are permitted, in lieu of using a gasket, to be sealed with caulk, foam, or equivalent material at both</p>

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				the interior seam between the sill plate and the subfloor and the seam between the top of the sill plate and the sheathing.”
00286	12/31/2012	Thermal Enclosure System Rater Checklist (Version 3, Rev. 06)	Clarification	Item 5.2.7 - Sealing common walls in structural masonry buildings
				Issue: Partners have asked if the common walls of multifamily dwelling units must be air sealed even when the common wall is not constructed of drywall. Currently, this Item only requires that the gap between the “drywall shaft wall (i.e. common wall) and the structural framing between units” be sealed at all exterior boundaries.
				Resolution: The intent of this item is to seal the gap between the common wall and the structural framing between units at all exterior boundaries, regardless of whether the common wall is constructed of drywall. To clarify this original intent, Item 5.2.7 will be revised as follows: “In multifamily buildings, the gap between the common wall (e.g. the drywall shaft wall) and the structural framing between units fully sealed at all exterior boundaries.”
00187	04/20/2012	HVAC System Quality Installation Rater Checklist (Version 3, Rev. 05)	Issue Under Review	Item 9.1 - Sone requirements for an intermittent kitchen exhaust fan with integrated microwave
				Issue: Item 9.1 requires, in part, that an intermittent exhaust fan be rated at ≤ 3 sones by the manufacturer when producing no less than the minimum airflow required by Section 8. Fans that are rated at ≥ 400 CFM are exempt from this requirement. Partners using over-the-range exhaust fan units that are integrated with microwaves are unable to find products that carry sone ratings. It is unclear whether more time is needed to simply test such products for sound levels or if the small size of these units will make it inherently difficult to meet the sound limits.
				Resolution: The sound and airflow limits defined in the Checklist are derived from ASHRAE 62.2-2010 and EPA does not intend to deviate from this standard. However, because it is impractical for many partners to implement at this time, enforcement of Item 9.1 for kitchen exhaust fans is delayed until further notice. This delay is effective while EPA works with manufacturers to assess the potential availability of over-the-range microwave products that would meet this requirement. Once EPA determines how this requirement can be successfully implemented – either through the availability of new products or through changes in kitchen ventilation strategies – EPA will provide a phase-in period that will enable partners to successfully implement the policy as fast as is practical.
00149	01/15/2012	HVAC System Quality Installation Rater Checklist	Issue Under Review	Section 11 – Filtration for mechanical ventilation
				Issue: Partners have asked if Section 11, related to filtration, applies to mechanical ventilation systems.

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		(Version 3, Rev. 04)		Resolution: [Issue under review.]
00287	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Clarification	Item 1.1 & Item 1.2, Footnote 4 - Use of swales and drains
				Issue: Footnote 4 requires homes to use swales or drains to remove water from the site where setbacks limit space to less than 10 feet. Partners have asked if the same alternative is permitted to be used even if space is not limited by setbacks.
				Resolution: Drains and swales are an acceptable alternative to proper site sloping regardless of whether setbacks limit space to less than 10 ft. To clarify this intent, Footnote 4 will be revised as follows: “Swales or drains designed to carry water from foundation are permitted to be provided as an alternative to the slope requirements for any home, and shall be provided for a home where setbacks limit space to less than 10 ft....”
00288	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Change	Item 1.3 and 1.4 - Capillary break beneath existing slabs
				Issue: Partners certifying existing homes have expressed concern that it is not feasible to remove slabs to place a capillary break beneath, even for a gut rehabilitation
				Resolution: The capillary break beneath a slab prevents water from wicking up from the ground below. To meet the intent of this requirement, existing homes will be permitted to install a sealed and continuous capillary break above the slab that is either a Class I or Class II Vapor Retarder. Some methods for achieving this intent include: <ul style="list-style-type: none"> • Applying a permanent and protected Class 1 Vapor Retarder that provides drainage space (e.g.an air gap membrane); OR • Applying a permanent and protected layer of extruded polystyrene insulation with taped joints or equivalent Class II Vapor Retarder system; OR • Applying a surface-applied crystalline water-proofing treatment: OR • Applying an epoxy that is a Class I Vapor Retarder. To prevent wear and tear in the capillary break over time, in occupiable spaces this capillary break must be durable to withstand occupant use or be protected with a durable floor surface. To prevent damage from moisture in the slab, Class I Vapor Retarders are not permitted to be installed on the interior side of air permeable insulation or other materials that are prone to moisture damage. A new Footnote will be added to this Item that reads as follows: “For an existing slab (e.g., in a home undergoing a gut rehabilitation), in lieu of a capillary break beneath the slab, a continuous and sealed Class I or Class II Vapor Retarder (per Footnote 6) is permitted to be installed on top of the entire slab. In such cases, up to 10% of the slab surface is permitted to be exempted from this requirement (e.g., for sill plates). In addition, for

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				existing slabs in occupiable space, the Vapor Retarder shall be, or shall be protected by, a durable floor surface. If Class I Vapor Retarders are installed, they shall not be installed on the interior side of air permeable insulation or materials prone to moisture damage.”
00289	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Comment	Item 1.4.1 - Location of capillary break
				Issue: Partners have asked if Item 1.4.1 only allows a capillary break to be placed under a structural slab or if a capillary break is permitted to be placed beneath a non-structural “rat slab” in a crawlspace to meet the intent of this Item.
				Resolution: A capillary break may be placed under any slab, even non-structural “rat slabs.”
00290	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Change	Item 1.5 - Finishing of exterior surface of existing below-grade walls
				Issue: Partners certifying existing homes have expressed concern that the exterior surface of foundation walls are already below grade and that it will not be feasible to excavate around the home, clean the walls, apply the exterior coating, and back-fill the excavated areas.
				<p>Resolution: The intent of this Item is to protect the home from damage caused by moisture in the ground. Water has the potential to migrate through below-grade walls and create durability problems in the wall assembly and reduce indoor air quality in the home. For foundation walls not framed with wood, existing home projects can meet this same intent by managing the water that comes through the walls with an interior drainage system. Note that when an uneven fieldstone or granite stone foundation exists, care must be taken to specify construction details and materials that insure an effective installation of drainage planes and capillary breaks against these uneven wall surfaces.</p> <p>For homes in soils that require a foundation drain, a system comprised of a drainage plane, capillary break, Class I Vapor Retarder, and air barrier that leads into the foundation drainage system is required. This system will allow water vapor and liquid to come through the wall and be directed into the drain, but otherwise block the water vapor and liquid from migrating into the basement space or crawlspace. This is permitted to be met with one or more materials such as the combination of spacer mesh and sealed foil-faced polyisocyanurate foam or a fully-sealed air gap membrane.</p> <p>For homes in soils that don’t require a foundation drain, a continuous capillary break and Class I Vapor Retarder adhered directly to the wall is required. This system will block the water vapor and liquid at the surface of the wall.</p> <p>To simplify the ability to reference the damp-proofing and waterproofing requirements for various wall types, the bullets in Item 1.5 will be revised to “a)” and “b)”.</p> <p>To ensure that a damp-proof coating is applied to all masonry and concrete wall types and not just a subset of specified wall types, Item 1.5a will be revised as follows: “For masonry and concrete walls (e.g., poured concrete, concrete masonry units, insulated</p>

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				<p>concrete forms) finish with damp-proofing coating.”</p> <p>To clarify this alternative compliance pathway for existing homes, a Footnote will be added to Item 1.5a that reads as follows:</p> <p>“The interior surface of existing below-grade walls (e.g., in a home undergoing a gut rehabilitation) listed in Item 1.5a are permitted to be finished as follows:</p> <ul style="list-style-type: none"> • Install a continuous and sealed drainage plane, capillary break, Class I Vapor Retarder (per Footnote 6) and air barrier that terminates into a foundation drainage system as specified in Item 1.8; OR • If a drain tile is not required as specified in Footnote 7, adhere a capillary break and Class I Vapor Retarder (per Footnote 6) directly to the wall with the edges taped/sealed to make it continuous. <p>Note that no alternative compliance option is provided for existing below-grade wood-framed walls.”</p>
00291	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Change	Item 1.8 – Required location of drain tile and applicability to existing homes
				<p>Issue: Partners certifying new homes have asked if a drain tile installed on the interior side of footings would meet the intent of this Item. Additionally, partners certifying existing homes have expressed concern that compliance with this Item would require excavation around the foundation and is not feasible.</p>
				<p>Resolution: The intent of this Item is to prevent water from collecting at the bottom of foundation walls. The accumulation of water increases hydrostatic pressure and accumulation is likely to increase with increasing depth below grade. As hydrostatic pressure increases, an increased force is applied to the foundation, which could lead to damage or to moisture migration through the wall. Drain tile, or an equivalent system, is required to be installed to transport water away from the foundation, thereby minimizing accumulation and hydrostatic pressure.</p> <p>In new construction, installation of the drain tile on the exterior is anticipated to be no more difficult than on the interior. Because of this and the fact that the exterior location is ideal, the drain tile is required to be installed on the exterior in new construction. Exceeding these minimum requirements by including a drain tile at both the exterior and interior of the footing would also be permitted.</p> <p>In existing homes (e.g., undergoing a gut rehabilitation), installation on the interior is generally less costly, while still providing substantively equivalent performance when coupled with a continuous and sealed drainage plane, capillary break, Class I Vapor Retarder, and air barrier that terminates into the foundation drainage system. In addition, existing homes with a basement foundation installed in Group 1 soils are exempt from installing this Item.</p> <p>To clarify that new homes are required to have a drain tile on the exterior side of footings, the</p>

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				<p>beginning of Item 1.8 will be revised as follows:</p> <p>“Drain tile installed at the exterior side of footings of basement and crawlspace walls...”</p> <p>To clarify that a drainage system is permitted to be installed on the interior side of existing footings (e.g., in homes undergoing a gut rehabilitation), the end of Footnote 7 will be revised as follows:</p> <p>“In an existing home (e.g, in a home undergoing a gut rehabilitation) the installation of a drain tile that is only on the interior side of the footings is permitted. Additionally, a drain tile is not required when a certified hydrologist, soil scientist, or engineer has determined that a crawlspace foundation, or an existing basement foundation (e.g., in a home undergoing a gut rehabilitation), is installed in Group I Soils (i.e. well-drained ground or sand-gravel mixture soils), as defined by 2009 IRC Table R405.1.”</p>
00292	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Comment	<p>Item 2.1 & Item 2.2 - Flashing and drainage plane for existing structural masonry walls</p>
				<p>Issue: Partners certifying existing homes have noted that the installation of flashing (and the associated drainage plane) at the bottom of exterior structural masonry walls is generally unfeasible and unnecessary.</p> <p>Resolution: EPA agrees that integrating a drainage plane and flashing at the bottom of structural masonry wall assemblies is not typically feasible or necessary. While the exterior surface of the masonry wall serves as a less effective drainage plane than in modern wall assemblies, this is counterbalanced by the masonry’s increased moisture storage capacity, which allows water to be retained without damage to the building until drying occurs. The addition of insulation to a masonry wall will alter this balance and must be carefully assessed. However, research indicates that in many cases, this balance can be achieved, avoiding the need to incorporate an interior drainage plane, flashing at the bottom of the drainage plane, and the addition of weep holes through the masonry. Partners are encouraged to read Building America’s “Measure Guideline: Internal Insulation of Masonry Walls” by J.F. Straube, K. Ueno, and C.J. Schumacher of Building Science Corporation.</p> <p>Note that a drainage plane with flashing is required for a wall assembly with a masonry veneer. A new Footnote will be added to Item 2.1 and Item 2.2 as follows:</p> <p>“These Items not required for existing structural masonry walls (e.g., in a home undergoing a gut rehabilitation). Note this exemption does not extend to existing wall assemblies with masonry veneers.”</p>
00293	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Refinement	<p>Item 2.2 and Footnote 8– Drainage plane: alignment with Indoor airPLUS language</p>
				<p>Issue: The Water Management System Builder Checklist is designed to align with EPA’s Indoor airPLUS (IAP) program. However, there is a slight disconnect between Item 2.2 and Footnote 8 of the ENERGY STAR Certified Homes program and the IAP program.</p>

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				<p>Resolution: To ensure that this checklist aligns with the guidance in IAP, the phrase “and fully sealed at all penetrations” will be added to Item 2.2 as follows:</p> <p>“Fully sealed continuous drainage plane behind exterior cladding that laps over flashing in Item 2.1 and fully sealed at all penetrations. Additional bond-break drainage plane layer provided behind all stucco and non-structural masonry cladding wall assemblies.”</p> <p>Additionally, the phrase “shingled at horizontal joints and “ will be added to Footnote 8 as follows:</p> <p>“Any of the following systems may be used: a monolithic weather-resistant barrier (i.e., house wrap) shingled at horizontal joints and sealed or taped at all joints; weather resistant sheathings (e.g., faced rigid insulation) fully taped at all “butt” joints; lapped shingle-style building paper or felts; or other water-resistive barrier recognized by ICC-ES or other accredited agency.”</p>
00294	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Refinement	<p>Item 2.3 - Flashing around window and door openings for structural masonry walls</p>
				<p>Issue: Partners have requested that details be provided to clarify the flashing requirements for windows and doors in structural masonry walls.</p>
				<p>Resolution: A variety of details can be employed to effectively flash windows and doors in structural masonry walls, including the use of flexible self-adhering flashing. Partners are encouraged to read Building America’s “Measure Guideline: Internal Insulation of Masonry Walls” by J.F. Straube, K. Ueno, and C.J. Schumacher of Building Science Corporation for an overview of such details.</p> <p>To provide greater flexibility to select appropriate details for flashing of windows and doors in structural masonry walls that meet the same intent as the current Checklist Item, the following phrase will be added to the end of Footnote 9: “...or equivalent details for structural masonry walls.”</p>
00295	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Refinement	<p>Item 3.1 – Step and kick-out flashing: alignment with Indoor airPLUS language</p>
				<p>Issue: The Water Management System Builder Checklist is designed to align with EPA’s Indoor airPLUS (IAP) program. However, there is a slight disconnect between Item 3.1 of the ENERGY STAR Certified Homes program and the IAP program.</p>
				<p>Resolution: To ensure that this checklist aligns with the guidance in IAP, the phrases “shingle-style” and “boot / collar flashing at all roof penetrations” will be added to Item 3.1 as follows:</p> <p>“Step and kick-out flashing at all roof-wall intersections, extending ≥ 4” on wall surface above roof deck and integrated shingle-style with drainage plane above; boot / collar flashing at all roof penetrations.”</p>
00078	07/25/2011	Water Management	Issue Under	<p>Item 3.2 – Gutters and downspouts</p>

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		System Builder Checklist (Version 3, Rev. 04)	Review	<p>Issue: Partners have requested that EPA allow alternatives to gutters and downspouts where a complete drainage system consistent with the International Residential Code (e.g., sloped sod with sand and swales) has been provided.</p> <p>Resolution: [Issue under review]</p>
00296	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Refinement	<p>Item 3.2 & Footnote 11 – Gutters & downspouts: alignment w/ Indoor airPLUS language</p> <p>Issue: The Water Management System Builder Checklist is designed to align with EPA’s Indoor airPLUS (IAP) program. However, there is a slight disconnect between Item 3.2 and Footnote 11 of the ENERGY STAR Certified Homes program and the IAP program.</p> <p>Resolution: To further clarify the intent of this Item and ensure that this checklist aligns with the guidance in IAP, the word “deposit” will be revised to “discharge” and the phrase “not connected to the foundation drain system” will be added to Item 3.2. A note will also be added at the end of this Item directing partners to the alternatives and exemptions in the Footnote. The revised Item will read as follows: “For homes that don’t have a slab-on-grade foundation and do have expansive or collapsible soils, gutters & downspouts provided that empty to lateral piping that discharges water on sloping final grade \geq 5 ft. from foundation, or to underground catchment system not connected to the foundation drain system that discharges water \geq 10 ft. from foundation. See footnote for alternatives & exemptions.” Additionally minor revisions to word choice will be made to Footnote 11 to improve consistency as follows: “The assessment of whether the soil is expansive or collapsible shall be completed by a certified hydrologist, soil scientist, or engineer. Item 3.2 is not required in dry climates as shown in 2009 IECC Figure 301.1 and Table 301.1. As an alternative, a roof design is permitted to be used that deposits rainwater to a grade-level rock bed with a waterproof liner and a lateral drain pipe that meets discharge requirements per Item 3.2. As another alternative, a rainwater harvesting system is permitted to be used that drains overflow to meet discharge requirements per Item 3.2.”</p>
00297	12/31/2012	Water Management System Builder Checklist (Version 3, Rev. 06)	Clarification	<p>Item 4.4. – Existing building materials with visible signs of water damage or mold</p> <p>Issue: Partners certifying existing homes have questioned whether this Item applies to building materials that are already installed and have expressed concern that the removal of structural building materials is not typically within the scope of a gut rehabilitation.</p> <p>Resolution: If mold is present on existing structural building materials, effort should be made to remove all visible signs of mold using detergent or other method. If removal methods are not effective, or if water damage is present, then the material must be replaced.</p>

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				<p>To clarify that the intent of this Item applies to both new and existing homes, Item 4.4 will be revised as follows:</p> <p>“Building materials with visible signs of water damage or mold <i>not</i> installed or allowed to remain.”</p>
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